

Process Compressor

Designed for API 618 heavy-duty processing applications, these units meet the broadest and most stringent requirements.



Design philosophy

The latest generation of GE Oil & Gas process compressors is the culmination of more than 40 years of research and development, continually advancing design tools, field-proven installations and global on-site experience.

Our modular approach to design and manufacturing takes advantage of standardized core components that allow full customization to each plant's requirements – always with the highest reliability and availability.

Key features & benefits

- Standardized components ensure proven performance and reliability, while increasing manufacturing and installation efficiency
- Extensive use of hydraulic tensioning to enhance reliability and maintenance ease
- Broad cylinder line-up with bore up to 1,250 mm and materials to accommodate all process requirements
- Proprietary cylinder valve design with plastic or metal plates to minimize power losses and ensure longest life in operation
- Eccentric piston shoe grooves to extend shoe and packing seal life
- A wide range of construction materials available to suit specific applications
- Extensive experience with every conceivable driver in a wide range of applications such as gas and steam turbines, variable and fixed-speed electric motors, and gas engines, with a unique in-house capability to design and supply complete trains
- Unique in-house capability for piping pulsation and vibration analysis to ensure smooth operation and extend the lifecycle of the most highly stressed parts such as packing cups and cylinder valves
- Complete LDPE plant analysis capability (pressures up to 3,500 bar), including the primary-booster compressor, hyper compressor, reactor, vessels and all interconnecting piping

Applications

Refinery	Chem/Petrochemical	Natural gas
Hydrocracking	Ammonia, Urea	Re-injection
Hydrotreating	Refrigeration	Gas lift
Hydrosulfurization (HDS)	Ethylene (LDPE)	Gathering
Fractionating	Ethylene Oxide	Pipeline
Reforming Catalytic Cracking	Polypropylene	Storage

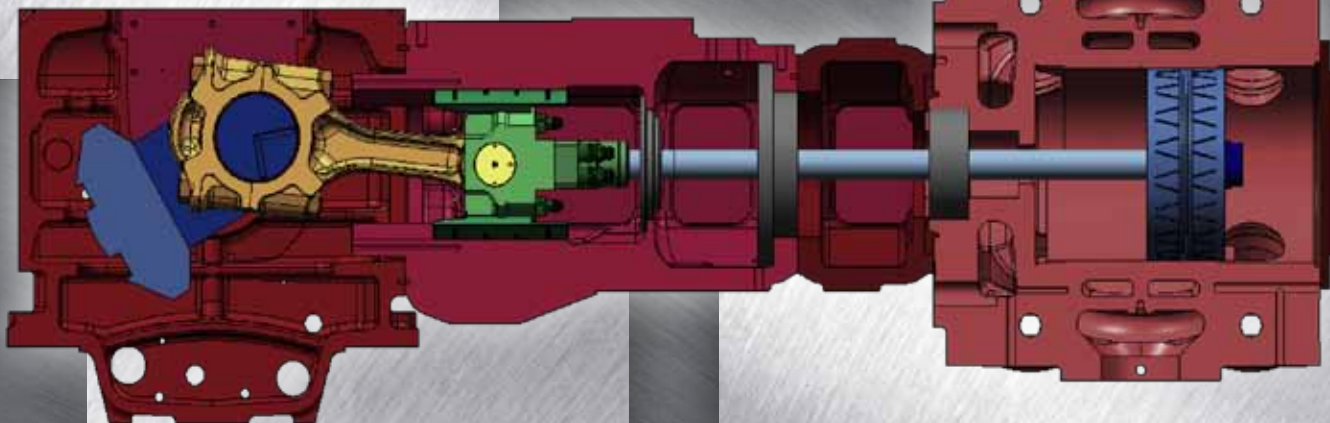


Performance & product characteristics

Frame Size	Throws	Max. Power (kW)	Max. Rod Load (kN)	Max. Stroke (mm)	Max. Speed (rpm)
OA	1	435	117	220	800
HA	2-4	2,120	145	180	1,000
HB	2-4	3,680	236	230	800
HD	2-6	7,800	322	280	700
HE	2-10	21,500	533	330	600
HE-S	2-6	15,300	670	330	800
HF	2-10	34,600	1,140	360	514
HG	2-10	41,000	1,550	400	450
SHM	2-6	7,980	358	150	1,200
SHMB	2-4	5,320	358	150	1,200

Higher rod load

- High-performance bearings
- No discontinuities – vertically mounted
- Oil distribution pockets – no grooves
- Forged body & hydraulically tensioned tie-bolts: +25% load



Proven reliability

- Die-forged steel
- Heavy-duty section
- Hydraulically tensioned tie-bolts

Optimized efficiency

- Higher-resistance materials: +25% MAWP
- CFD optimization – higher efficiency: +3%
- New test rig – data validation and higher predictability
- Casting capabilities up to 10 cylinders

Designed for
maintainability
 &
reliability



GE imagination at work

ge.com/oilandgas